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Quick guide
Mini Crosser M² 4W Cabin

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GB

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Introduction

Congratulations on your new Mini Crosser M² 4W Cabin electric mobility scooter. You have now taken possession of an electric mobility scooter developed for outdoor driving by active users. It is what is called a Class C vehicle in accordance with the European classification of electric scooters.

For optimum enjoyment of this vehicle - and to avoid breakdowns and accidents - we recommend that you read the User Manual carefully. As a new user, you should pay particular attention to the section entitled “Driving the Mini Crosser M² Cabin”.

Note:
This Quick Guide is to be regarded as a supplement to the User Manual. The information in the Quick Guide cannot, therefore, be expected to be complete.

NB: Errors and omissions excepted. Specifications subject to change. We reserve the right to update this guide as required.

Warning!
The vehicle must not be lent to persons who are not completely familiar with it.

The vehicle is designed for one person only.

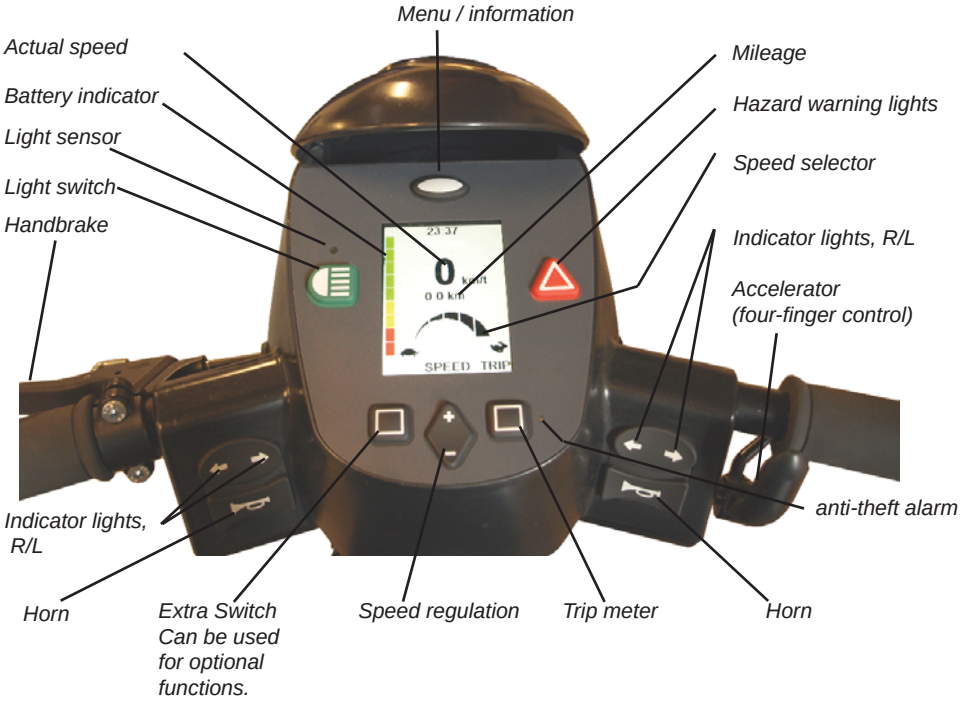
Max. user weight 175 kg. Can be specially adapted at the factory for users weighing up to 200 kg.

Medema Production A/S is not responsible for any damage or injuries caused by inappropriate or unsafe use of the Mini Crosser.

Control panel

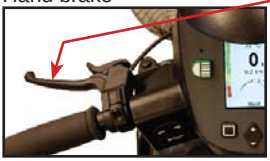
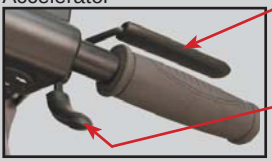
Avoid subjecting the control panel to jarring and knocks. Take care when driving and avoid hitting obstacles.

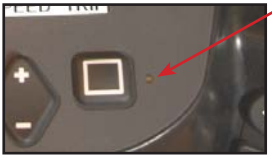
The manufacturer accepts no liability in respect of the unauthorised opening, adjustment or modification of the control panel.



User menu

Term	Description
Menu / information	Press the button and a menu at the top of the display switches between ”Date”, ”Time”, ”Complete km”, ”Complete running time”, ”Battery Voltage” Service ”and” inclination ”.”Slope” is optional, and appears only if it is engaged. Button Menu / information are also used to modify the user parameters. Access these parameters by holding the menu button for approx. 3 sec.
Key switch	To start the vehicle: Turn the key to position (1). When the ignition key is turned to drive position (1), the display lights up. The Scooter can drive within approx. 1 second. The first half second after the Mini Crosser is on, the control is making a safety check of the electrical system. If the accelerator is affected during this time, the Mini Crosser will not be able to run, before the key again has been turned at 0 and back to 1 again.
Speed selector	The turtle indicates lowest speed range. 0-6 km / h. The hare indicates the highest speed range. Up to 15 km / h. Increase/decrease with + / - button. The icons turtle/hare can be turned on/off from the User menu.
Battery indicator	The left side of the display shows battery level indicator. Indicates that after approx. ½ seconds, the battery state of charge. Provides a more accurate indication after approx. 1 minute drive. When both red, yellow and green box lights are the batteries fully charged. Can be divided into 10 or 3 boxes. When the view is down the bottom of the yellow batteries should be recharged as soon as possible. If there is only light in the red boxes or fl ashing the batteries must be charged immediately.
Trip meter	TRIP button resets the trip meter. Can be used while driving.

Term	Description
Hand brake 	Works on the left rear wheel and should only be used as extra brake / emergency brake and parking brake. It can be blocked in the locked position. Also available as a foot brake.
Accelerator  Forw. / Backw.	Front arm activates slowly and the Mini Crosser will start running forward. The more press, the faster it will run. When the lever is released, the arm fl ips itself back to the starting position and Mini Crosser stops. Upon activation of the posterior arm, the Mini Crosser run backward. The Magnetic brake on the rear wheels will strike at standstill, corresponding to the parking brake on a car. With speed regulation, speed can also be regulated downhill. The engine will then act as a brake.
Light switch	Turns on the front and rear lights. The key switch must however be turned to position 1 (drive).
Hazard warning lights	Turns on all lamps at once. Also works when the key is removed, or turned to 0 (stop position).
Indicator lights switch	Arrow left: lamp left side. Arrow Right: lamp right side. Activate the same button again to turn off fl ashing lights.

Term	Description
Horn	Electric horn which can be programmed in volume in the User Menu. Activated by pressing the horn button.
Charging socket	Turn off the Mini Crosser (key in position 0) during charging. Note that it is not possible to run while the batteries recharge. See also the section ”Batteries and Charging.”
Extras	
Anti-theft alarm 	(Extra) With this parameter set to ON, the anti-theft alarm is turned on every time you turn off the Mini Crosser. An activated alarm is turned off by turning the key to 1 (drive). If you have no opportunity to get to the Mini Crosser with the key, the alarm will stop after approx. 20 seconds. Shake the scooter again, the alarm will be activated again.
Inclination	Inclination-symbols.

Term	Description
Inclination Alarm sideways	By exceeding the preset value, the symbol flashes and the horn hoots, if the parameter is enabled.
Inclination Alarm forw./backw.	By exceeding the preset value, the symbol illuminate and the horn hoots, if the parameter is enabled.
Overheating step 1	Step 1: The symbol flashes and the speed is reduced to half power. Wait for 3-5 min and start again.
Overheating step 2	Step 2: The symbol will illuminate and Mini Crosser stops. Wait 3-5 minutes and start again.

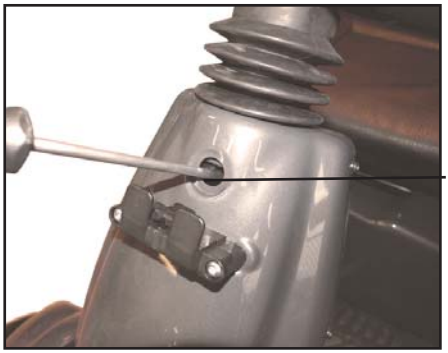
Steering column

Can be adjusted forward/back with the release lever. Pull down on the lever and pull the handlebars closer for a good driving position. Use the lever again and push the steering column forward to make it easier to get out.

The height of the steering column can be adjusted approx. 11 cm up/down. First remove the rubber plug covering the Allen screw. Adjust the height using a 4 mm Allen key.

Adjusting the height of the handlebars.

Lever for adjusting the angle of the handlebars



Adjusting the height of the handlebars.

Allen screw for height adjustment

Seat rotation

Pull the release lever back. The seat can be rotated 90° to either side. When the lever is released, it engages with the seat and holds it in place at 45° intervals.

Other seats that can be supplied for the Mini Crosser work on similar principles. The release lever is normally mounted on the right, but can be put on the left if so wished.

IMPORTANT!
The Mini Crosser is most stable when the seat is in its lowest position. Always drive carefully when the seat is raised. Never use the seat adjustment when driving on an uneven surface or in hilly terrain.

Take extra care when lowering the seat on a Mini Crosser using electric seat adjustment. Make sure that nothing is trapped in the space between the seat and the chassis.

Release lever for seat rotation. Release lever for seat forward/back.

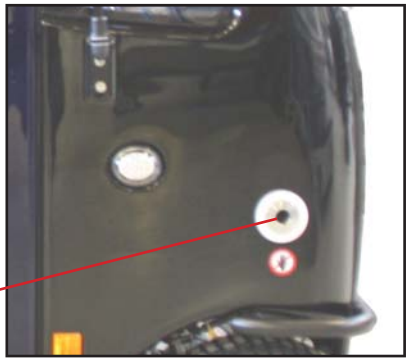
Fuel for heater

The tank for fuel is placed behind the seat, and filled from the outside.

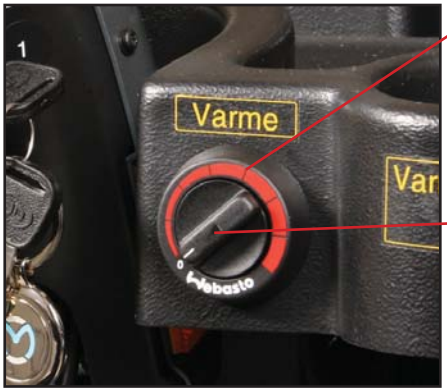
Use ONLY paraffin or diesel.

In the front, right side of the Mini Crosser M^2 Cabin, you find the the exhaustion from the heater.

NOTE! It gets VERY hot.



Exhaustion from heater.



Knob to:
- turn heater on/off
- ajusting the temperature
- remove fault code.

Indicator light for on/off and fault code readout.

For more information: see Webasto user guide.

Windscreen wiper / washer

Start the windscreen wiper by turning this knob.

Notice the smooth speed ajusting.

Windscreen wiper - turn the knob.

Washer - press this button

Driving the Mini Crosser M² Cabin

Getting in and out

It is important to learn a safe technique for getting in and out of the Mini Crosser.

In general the following method should be followed:

- Make sure that the Mini Crosser M² Cabin is off (switch turned to 0) when getting in and out, otherwise the Mini Crosser could start if the accelerator was touched inadvertently.
- Make sure that the brake is on. (Lever for disengaging motor in top position.)
- Put the steering column in vertical position.
- If necessary, raise the armrest.

Note! - Do NOT use the dors as support, when entering or getting out of the vehicle.

IMPORTANT!
The Mini Crosser will turn itself off automatically after it has been stationary for 10 minutes even if the key has been turned to driving position.

To restart the vehicle, the key must be turned to stop position (0) and then to driving position (1).

When driving in traffic...

Be particularly aware of the following when driving in traffic:

- The Mini Crosser is a low vehicle and not always easy for other road users to see. Make quite sure that other road users have seen you before driving onto the highway.
- Keep an eye on traffic behind you. Keep well over to the side of the road when driving on busy roads.
- Turning right and left at crossroads. Be aware of cyclists and pedestrians. Follow the rules of the road for cyclists.
- How quickly things are happening. How long do the lights stay green? How quickly are cars approaching? etc.

Electromagnetic compatibility

If the Mini Crosser starts making involuntary movements or if the brakes are released, turn the Mini Crosser off as soon as it is safe to do so. In certain circumstances a Mini Crosser can set off shop alarms.

The Mini Crosser satisfies the requirements for the use of scooters in an environment with electromagnetic noise. There may, however, be rare situations in which electromagnetic noise can affect the Mini Crosser. Sources of such noise include radio and television stations, amateur radio transmitters and mobile phones.

If such equipment is being used close by, it is recommended that the Mini Crosser is switched off. **Mobile phones should not be used while driving.**

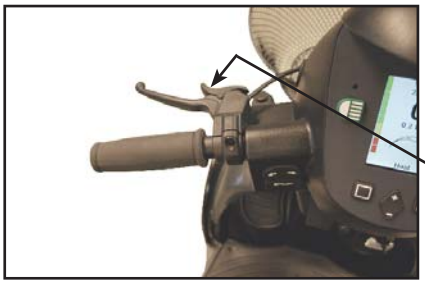
Braking systems

There are three braking systems on the Mini Crosser:

- Motor brake - adjusts vehicle speed also when going downhill.
-
- Magnetic brake - the magnetic brake is automatic and engages when the Mini Crosser stops. In an emergency, the Mini Crosser can be stopped instantaneously by turning the key switch. Please note that this will cause very sharp braking.The brake must never be disengaged mechanically using the disengagement lever on a slope. This function is only designed for use when pushing the Mini Crosser on a flat road.

- Electric safety brake - if the brake is somehow disengaged on a slope/hill, the Mini Crosser will brake automatically when it reaches a certain speed. There is an electric safety feature in the control system, which works even if the battery is disconnected. This is also the reason why the Mini Crosser cannot be towed at more than 5 km/h. See the section about towing.

- Handbrake - intended as an emergency brake and parking brake. It must be operated with caution when driving in slippery conditions and downhill.



When using the handbrake as a parking brake, lock it in braking position by pressing the button in while applying the brake. To release the brake, press the button again.

Handbrake lock

ALWAYS switch the scooter off when it is not in use. Turn the key to 0.

Charging

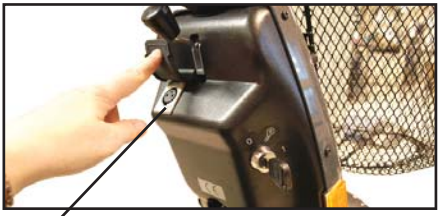
The Mini Crosser should be charged while not in use. The charger supplied from the factory switches to trickle charging (very low power consumption) automatically when the batteries are fully charged. You can therefore leave the charger connected until the Mini Crosser is next used. The charger cannot overcharge the batteries.

The charger will flash until charging is complete. Then it will show a steady light.

IMPORTANT!
The charger must not be placed on the seat during charging.

IMPORTANT!
Never use charging devices other than those supplied from the factory without first contacting the dealer.

For further information see the User Manual.

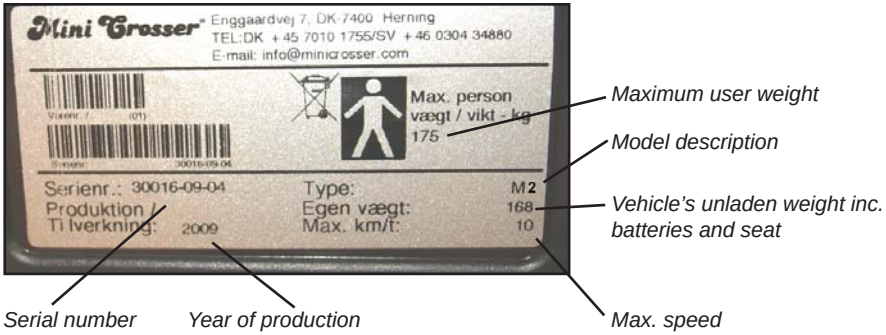


Connect the charging plug to the 3-pin socket on the steering column. The charging socket is located under the protective cover.

Serial number

All vehicles have a serial number plate showing the year of production and serial number. The same serial number can also be found on the front of the User Manual.

Please quote this number when making inquiries about servicing, spare parts, etc.



Position of serial number plate on vehicle.

Specific driving situations

Up kerbs

- Stop at right angles to the kerbstone about 5-10 cm away from it. Keep an eye on other road users.
- Lean forwards.
- Accelerate moderately so that your vehicle can overcome the obstacle. Do not stop halfway, but reduce speed once the vehicle is up.
- If the kerb is too high, do not try again, but find an alternative route.

Down kerbs

- Lean back.
- If you are driving onto a road with traffic, keep an eye on other road users.
- Drive forwards and down the kerb at low speed. Make sure that your anti-tilt wheels (if fitted) do not catch on the edge.

Up a ramp/hill

- There is a risk of tipping over backwards if the seat is pushed back when you start driving up a slope, e.g. a ramp.
- Pull the seat forward! Check that any ramp is stable.
- Lean forwards.
- Accelerate moderately so that your vehicle can overcome the obstacle. Do not stop halfway. Reduce speed once the vehicle is up. If you need to start on a hill, accelerate slowly so as not to tip over backwards.

Down a ramp/hill

- Check that any ramp is stable.
- Lean back.
- Drive slowly down. Avoid stopping midway on short, steep slopes. On long hills, it is advisable to stop every now and again if you feel your speed is getting too high.

Across a slope

- Lean into the slope.
- Avoid sudden and sharp movements. This is particularly relevant when reversing.
- Always drive at low speed.

Long hills/difficult ground

The Mini Crosser is at risk of overheating on very long and steep hills or on very soft ground, possibly also combined with high user weight.

To protect the Mini Crosser motor from overheating, there is a built-in thermoswitch, which initially sets the Mini Crosser to half speed.

However, if you carry on moving over difficult ground, the Mini Crosser will at some stage stop completely, and the battery indicator will flash with 6 lamps. The Mini Crosser must be left to cool down for 3-5 minutes before it can start again.

To reset the fault, switch off the Mini Crosser then turn it on again.

If the Mini Crosser has not had long enough to cool down when it is restarted, it will initially only run at half speed.

Note:
The situation described above will never happen in normal use. It only happens if the conditions are extremely challenging.

Flash codes

If there is an electronic fault, a number of lamps in the battery indicator will light up. The following table shows what they mean.

Lamps	Causes	Remedy
1 lamp	The batteries need charging or the connection to a battery is poor.	Check all connections between the controller and batteries. If these are fine, try charging the batteries
2 lamps	Poor connection to the motor.	Check the connection between the motor and controller. Contact supplier.
3 lamps	Short-circuit between the motor and a battery connection.	Contact supplier - say how many lamps are lit.
4 lamps	Not in use	
5 lamps	Not in use	
6 lamps	Not in use	
7 lamps	Accelerator fault.	Contact supplier.
8 lamps	Controller fault.	Contact supplier.
9 lamps	Poor connection to motor brake. Magnetic brake is disengaged.	Check the connections from brake to controller, or push the brake lever up. Check that the vehicle is not disengaged.
10 lamps	The controller has been supplied with a high voltage in excess of 38 V. Usually seen in the case of a poor connection.	Check all connections from the batteries to the controller.
Running lights	Charger is connected. Remove charger.	Remove charger.
Running lights from the center and out.	The accelerator has been aktivated during start up.	Turn the key back to 0 and to 1 to reset the fault.

Programming

NOTE! For safety reasons, modifications may only be made by trained personnel, such as Mini Crosser service engineers and consultants or authorised service personnel at mobility centres, etc.

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